**BRUHAT BANGALORE MAHANAGARA PALIKE**

Detailed Estimate for Upgradation of lighting of Bangalore Major roads current works

Budget Head .....

Division No..... Estimate No. 19..... For Rs. 1096000.00

| Sl. No | SR Page & SL No | Description of Work | Qty. | Rate Rs. | Unit | Amount |
|---|---|---|---|---|---|---|
| 1 | 22/4.16 | Supplying High pressure Sodium Vapour street light luminaire 250Watts suitable for use with high pressure Sodium Vapour lamp with integrated control gear & grey color power coated. The fitting shall be non corrosive pressure die cast aluminum housing with high purity anodized aluminum reflector with EPDM Gaskets suitable for Outer Dia of pole 40mm - 60mm. Cable Entry through a cable gland with toggle clips. IP65 Protection for both optical & Electrical Compartment. Bottom cover may be with Poly carbonate/tempered/ toughened glass. Luminaire efficiency should be >60% & ambient temperature > 35 deg C. High Intensity Discharge Electro Magnetic Ballast with Copper winding of Orthocyclic winding coil. Class H insulated dual coated copper wire. Compliance to IEC 61347-2-9 Safety & IEC 60923 - Performance. Winding Temperature for HID Ballast Tw = 130 deg C & temperature rise ?T = 70 deg C. Luminaire shall be suitable to operate on 230/250 Volts finish including wiring, suitable to operate on 230/250 Volts 50 Hz AC supply finish including wiring, ignitor, condenser. SS Toggles for opening front hingeable | 29 | 6900.00 | Each | 200100.00 |
| 2 | 34/5.13.1.1 | Fabricating, supplying and erecting swaged tubular pole of height …Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enameled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7.5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch, The pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0.6M above ground level as per IS 2713 - 7. Erection of heavy duty pole on Footpath / median9Mt (5Mt Hb,165.1mm dia 4.85mm thick x2M Hm, 139.7mm dia 4.50mm thick x 2M Ht,114.3mm dia 3.65mm thick) as per IS 410 SP 32 | 4 | 15000.00 | Each | 60000.00 |

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| 3 | 108/17.4.1 | Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, | 5 | 1292.00 | Each | 6460.00 |
| 4 | 61/7.65 | Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase | 1800 | 177.00 | Per Mtr | 318600.00 |
| 5 | Bes SR | Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR | 1800 | 10.30 | Per Mtr | 18540.00 |
| 6 | Bes SR | Suspension clamp assembly 25 to 95 sqmm bare messenger. Bescom SR of 2010-11, Page no 16 of 34, Sl no 51.17. | 70 | 280.00 | Each | 19600.00 |
| 7 | Bes SR | Dead end clamp / Anchor clamp assembly 25 to 95 sqmm bare messenger, Bescom SR of 2010-11, Page no 16 o 34, Sl no 51.16. | 20 | 140.00 | Each | 2800.00 |
| 8 | Bes SR | Universal Hook and Bolts and Nuts, Bescom SR of 2010-11, Page no 16 of 34, Sl no. 51.15. | 70 | 280.00 | Each | 19600.00 |
| 9 | Bes SR | Erection of Suspension Clamp - 25 to 95 sqmm bare messenger. Bescom SR of 2010-11, Page No 21 of 27, Sl No 26.6. | 70 | 85.00 | Each | 5950.00 |
| 10 | Bes SR | Erection of Anchor Clamp - 25 to 95 Sq. mm bare messenger. Bescom SR of 2010-11, Page No 21 of 27, Sl no 26.7. | 70 | 85.00 | Each | 5950.00 |
| 11 | 55/7.4.5 | PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable. 4 core 16 sqmm | 100 | 140.40 | Per Mtr | 14040.00 |
| 12 | | 3.5 core 25 sqmm | 200 | 165.00 | Per Mtr | 33000.00 |
| 13 | 61/7.8.2 | supplied agency in existing trench Gl pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct. 6 sqmm to 16 sqmm | 100 | 10.80 | Per Mtr | 1080.00 |
| 14 | | b)25sqmm to 75 sqmm | 200 | 16.00 | Per Mtr | 3200.00 |
| 15 | 62/7.9.1 | trench to the required ground level and consolidating etc.,complete. (As perCivil SR KSRB l-2, P-7).a) In soil (ordinary) | 100 | 78.00 | Per Mtr | 7800.00 |
| 16 | AR | Micro processor based electronic timer consisting of Display Unit(LCD), built in Real Time Clock (RTC) and keypad with option to operate relay/contactor in programmable mode (pre- | 8 | 7214.00 | Each | 57712.00 |
| 17 | 6.12.4 | Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 | 11 | 9915.00 | Each | 109065.00 |
| 18 | 47/6.16.2 | MCB distribution boards using necessary fixing materials and wiring complete as required. b)40-63Amp SPN, Group A | 30 | 677.00 | Each | 20310.00 |

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6460.00

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| 19 | 2/1.1.3 | conditpipe,,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC | 100 | 100.00 | Per Mtr | 10000.00 |
| 20 | 6/2.6.7 | 1100v grade, multis and **Copper** conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm | 28 | 132.00 | Per Mtr | 3696.00 |
| 21 | 12/2.12.1 | 1100v grade stranded aluminum unsheathed wire single core cable in open or concealed system of wiring as per IS - 694 : 19904sq mm | 250 | 7.50 | Per Mtr | 1875.00 |
| 22 | 45/6.7.4 | Supplying and fixing of Procelain fuse channel with cut out on exisiting wooden/panel using necessary nuts, bolts and washers etc., complete.d) 100 Amps | 24 | 360.00 | Each | 8640.00 |
| 23 | 62/7.12.3 | wall thick ness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class. c) 65mm | 25 | 585.00 | Per Mtr | 14625.00 |
| 24 | 49/6.40.2 | SWG suitable lfor floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking | 200000 | 0.33 | Sqcm | 66000.00 |
| 25 | 49/6.38.2 | using requiemed capacity electrolytic aluminium strips covered with heat shrinkable couloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are | 5 | 2942.00 | Per Mtr | 14710.00 |
| 26 | 49/6.39.1 | M.S. angle iron.. And M.S. flat… with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)40X40X6mm | 50 | 263.00 | Per Mtr | 13150.00 |
| 27 | 46/6.13.B.6 | (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of overload and short circuit with thermal Magnetic/ | 10 | 5809.00 | Each | 58090.00 |
| 28 | 55/7.3 | Supplying and running of Gl/Copper strips for grounding connections, using necessary fixing materials as required. II Copper Strip. B)25X3mm | 18 | 77.00 | Per Mtr | 1386.00 |
| 29 | | BESCOM DEPOSITE CHARGES | | | | 21.00 |
| | | **Total** | | | | **1096000.00** |

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD (Elec) SR of 2014-15 /lowest quotation rates/ approved rates.

Asst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
Sub-Division No.
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
DASARAHALLI DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

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